

57 (Twice-Amended). A process for producing a protein which comprises culturing cells transformed with the nucleotide sequence according to (i) to (xxxiii), [✓](xliiii) to (lx) [✓]or (lxiv) to (lxxxvi) of claim 77 or a fragment thereof, and collecting hBSSP4 produced.

⁵⁷ 59 (Amended). The process according to claim 57 wherein the cells are *E. coli* cells, animal cells or insect cells.

60. A non-human transgenic animal whose expression level of BSSP4 gene has been altered.

61. The non-human transgenic animal according to claim 60, wherein BSSP4 gene is cDNA, genomic DNA or synthetic DNA encoding BSSP4.

62. The non-human transgenic animal according to claim 60, wherein the expression level has been altered by mutating a gene expression regulatory site.

63. A knockout mouse whose mBSSP4 gene function is deficient.

⁶⁴ 64 (Twice-Amended). An antibody against the protein according to claim 76 or a fragment thereof.

20 65. The antibody according to claim 64 which is a polyclonal antibody, a monoclonal antibody or a peptide antibody.

C17
66(Twice-Amended). A process for producing a monoclonal antibody against the protein according to claim 76 or a fragment thereof which comprises administering the protein according to claim 76 or a fragment thereof to a warm-blooded animal other than a human being, selecting the animal whose antibody titer is recognized, collecting its spleen or lymph node, fusing the antibody producing cells contained therein with myeloma cells to prepare a monoclonal antibody producing hybridoma.

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67(Twice-Amended). A method for determining the protein according to claim 76 or a fragment thereof in a specimen which is based on immunological binding of an antibody against the protein or a fragment thereof to the protein or a fragment thereof.

C17
68(Twice-Amended). A method for determining hBSSP4 or a fragment thereof in a specimen which comprises reacting a monoclonal antibody or a polyclonal antibody against the protein (a) to (v) or (cc) to (nn) of claim 76 or a modified derivative or fragment thereof and a labeled antibody with hBSSP4 or a fragment thereof in the specimen to detect a sandwich complex produced.

Sub B
69 (Twice-Amended). A method for determining hBSSP4 or a fragment thereof in a specimen which comprises reacting a monoclonal antibody or a polyclonal antibody against the protein (a) to (v) or (cc) to (nn) of claim (76) or a modified derivative or fragment thereof or a fragment thereof with labeled hBBSP4 and hBSSP4 or a fragment thereof in the specimen competitively to detect an amount of hBSSP4 or a fragment thereof in the specimen based on an amount of the labeled hBBSP4 reacted with the antibody.

10 70 (Amended). The method according to claim (67) wherein the specimen is a body fluid.

C18
71 (Twice-Amended). A diagnostic marker for diseases in tissues comprising the protein according to claim (76).

15 72. The marker according to claim 71 to be used for diagnosis of Alzheimer's disease or epilepsy in brain.

73. The marker according to claim 71 to be used for diagnosis of cancer or inflammation of brain, prostate or testicle.

20 74. The marker according to claim 71 to be used for diagnosis of sterility in semen or sperms.

75. The marker according to claim 71 to be used for diagnosis of prostatic hypertrophy in prostate.

--76 (New). A protein selected from the group

7 pages
C19
consisting of: ~~29 products~~ not having a special technical feature

AN (a) a protein having the amino acid sequence composed of 268 amino acids represented by the 1st to 268th amino acids of SEQ ID NO:2;

A_N (b) a protein having an amino acid sequence derived from the amino acid sequence represented by SEQ ID NO:2 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the 1st to 268th amino acids of SEQ ID NO:2;

B_N (c) a protein having the amino acid sequence composed of 270 amino acids represented by the 1st to 270th amino acids of SEQ ID NO:4;

C_N (d) a protein having an amino acid sequence derived from the amino acid sequence represented by the 1st to 270th amino acids of SEQ ID NO:4 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the 1st to 270th amino acids of SEQ ID NO:4;

C_N (e) a protein having the amino acid sequence composed of 257 amino acids represented by the 1st to 257th amino acids of SEQ ID NO:6;

C_N (f) a protein having an amino acid sequence derived from the amino acid sequence represented by the 1st to 257th amino acids of SEQ ID NO:6 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the 1st to 257th amino acids of SEQ ID NO:6;

D_N (g) a protein having the amino acid sequence composed of 97 amino acids represented by the 1st to 97th amino acids of SEQ ID NO:8;

D_N (h) a protein having an amino acid sequence derived from the amino acid sequence represented by the 1st to 97th amino acids of SEQ ID NO:8 by deletion, substitution or

addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the 1st to 97th amino acids of SEQ ID NO:8;

CH ~~EW~~ (i) a protein having the amino acid sequence composed of 158 amino acids represented by the 1st to 158th amino acids of SEQ ID NO:10;

CH ~~EW~~ (j) a protein having an amino acid sequence derived from the amino acid sequence represented by the 1st to 158th amino acids of SEQ ID NO:10 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the 1st to 158th amino acids of SEQ ID NO:10;

EW (k) a protein having the amino acid sequence composed of 82 amino acids represented by the 1st to 82nd amino acids of SEQ ID NO:12;

EW (l) a protein having an amino acid sequence derived from the amino acid sequence represented by the 1st to 82nd amino acids of SEQ ID NO:12 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the 1st to 82nd amino acids of SEQ ID NO:12;

GN (m) a protein having the amino acid sequence composed of 185 amino acids represented by the 1st to 185th amino acids of SEQ ID NO:14;

GN (n) a protein having an amino acid sequence derived from the amino acid sequence represented by the 1st to 185th amino acids of SEQ ID NO:14 by deletion, substitution or addition of one to several amino acids and having the same

property as that of the protein having the amino acid sequence represented by the 1st to 185th amino acids of SEQ ID NO:14;

HN (o) a protein having the amino acid sequence composed of 80 amino acids represented by the 1st to 80th amino acids of SEQ ID NO:16;

C *HN* (p) a protein having an amino acid sequence derived from the amino acid sequence represented by the 1st to 80th amino acids of SEQ ID NO:16 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the 1st to 80th amino acids of SEQ ID NO:16;

IN (q) a protein having the amino acid sequence composed of 253 amino acids represented by the 1st to 253rd amino acids of SEQ ID NO:18;

IN (r) a protein having an amino acid sequence derived from the amino acid sequence represented by the 1st to 253rd amino acids of SEQ ID NO:18 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the 1st to 253rd amino acids of SEQ ID NO:18;

Trisdecapetide *APLN* (s) a protein having the amino acid sequence composed of 34 amino acids represented by the -49th to -16th amino acids of SEQ ID NO:2;

APLN (t) a protein having an amino acid sequence derived from the amino acid sequence represented by the -49th to -16th amino acids of SEQ ID NO:2 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence

represented by the -49th to -16th amino acids of SEQ ID NO:2;

pentadeca peptide $A_{P2N}^{(u)}$ a protein having the amino acid sequence composed of 15 amino acids represented by the -15th to -1st amino acids of SEQ ID NO:2;

Q14 $A_{P2N}^{(v)}$ a protein having an amino acid sequence derived from the amino acid sequence represented by the -15th to -1st amino acids of SEQ ID NO:2 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the -15th to -1st amino acids of SEQ ID NO:2;

$J_N^{(w)}$ a protein having the amino acid sequence composed of 259 amino acids represented by the 1st to 259th amino acids of SEQ ID NO:20;

$J_V^{(x)}$ a protein having an amino acid sequence derived from the amino acid sequence represented by the 1st to 259th amino acids of SEQ ID NO:20 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the 1st to 259th amino acids of SEQ ID NO:20;

$J_{P1N}^{(y)}$ a protein having the amino acid sequence composed of 34 amino acids represented by the -49th to -16th amino acids of SEQ ID NO:20;

$J_{P1V}^{(z)}$ a protein having an amino acid sequence derived from the amino acid sequence represented by the -49th to -16th amino acids of SEQ ID NO:20 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the -49th to -16th amino acids of SEQ ID NO:20;

JP2N^(aa) a protein having the amino acid sequence composed of 15 amino acids represented by the -15th to -1st amino acids of SEQ ID NO:20;

JP2V^(bb) a protein having an amino acid sequence derived from the amino acid sequence represented by the -15th to -1st amino acids of SEQ ID NO:20 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the -15th to -1st amino acids of SEQ ID NO:20;

AN^(cc) a protein having the amino acid sequence composed of 317 amino acids represented by the -49th to 268th amino acids of SEQ ID NO:2;

AV^(dd) a protein having an amino acid sequence derived from the amino acid sequence represented by the -49th to 268th amino acids of SEQ ID NO:2 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the -49th to 268th amino acids of SEQ ID NO:2;

AN^(ee) a protein having the amino acid sequence composed of 283 amino acids represented by the -15th to 268th amino acids of SEQ ID NO:2;

AV^(ff) a protein having an amino acid sequence derived from the amino acid sequence represented by the -15th to 268th amino acids of SEQ ID NO:2 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the -15th to 268th amino acids of SEQ ID NO:2;

BN^(gg) a protein having the amino acid sequence

composed of 319 amino acids represented by the -49th to 270th amino acids of SEQ ID NO:4;

CV *BV* (hh) a protein having an amino acid sequence derived from the amino acid sequence represented by the -49th to 270th amino acids of SEQ ID NO:4 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the -49th to 270th amino acids of SEQ ID NO:4;

BV (ii) a protein having the amino acid sequence composed of 285 amino acids represented by the -15th to 270th amino acids of SEQ ID NO:4;

BV (jj) a protein having an amino acid sequence derived from the amino acid sequence represented by the -15th to 270th amino acids of SEQ ID NO:4 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the -15th to 270th amino acids of SEQ ID NO:4;

CN (kk) a protein having the amino acid sequence composed of 306 amino acids represented by the -49th to 257th amino acids of SEQ ID NO:6;

CV (ll) a protein having an amino acid sequence derived from the amino acid sequence represented by the -49th to 257th amino acids of SEQ ID NO:6 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the -49th to 257th amino acids of SEQ ID NO:6;

CN (mm) a protein having the amino acid sequence composed of 272 amino acids represented by the -15th to 257th

amino acids of SEQ ID NO:6;

CV (nn) a protein having an amino acid sequence derived from the amino acid sequence represented by the -15th to 257th amino acids of SEQ ID NO:6 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the -15th to 257th amino acids of SEQ ID NO:6;

JN (oo) a protein having the amino acid sequence composed of 308 amino acids represented by the -49th to 259th amino acids of SEQ ID NO:20;

JV (pp) a protein having an amino acid sequence derived from the amino acid sequence represented by the -49th to 259th amino acids of SEQ ID NO:20 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the -49th to 259th amino acids of SEQ ID NO:20;

JN (qq) a protein having the amino acid sequence composed of 274 amino acids represented by the -15th to 259th amino acids of SEQ ID NO:20;

JV (rr) a protein having an amino acid sequence derived from the amino acid sequence represented by the -15th to 259th amino acids of SEQ ID NO:20 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the -15th to 259th amino acids of SEQ ID NO:20; and

K (ss) a modified derivative or fragment of these proteins (a) to (rr).--

--77(New). A nucleotide sequence selected from the group consisting of:

CLY ~~NA_N~~ (i) a nucleotide sequence represented by the 151st to 954th nucleotides of SEQ ID NO:1;

~~NA_N~~ (ii) a nucleotide sequence encoding the amino acid sequence represented by the 1st to 268th amino acids of SEQ ID NO:2;

~~NA_N~~ (iii) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (i) or (ii) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the 1st to 268th amino acids of SEQ ID NO:2;

~~NB ~~NA_N~~~~ (iv) a nucleotide sequence represented by the 151st to 960th nucleotides of SEQ ID NO:3;

~~NB_N~~ (v) a nucleotide sequence encoding the amino acid sequence represented by the 1st to 270th amino acids of SEQ ID NO:4;

~~NB_N~~ (vi) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (iv) or (v) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the 1st to 270th amino acids of SEQ ID NO:4;

~~NC_N~~ (vii) a nucleotide sequence represented by the 151st to 921st nucleotides of SEQ ID NO:5;

~~NC_N~~ (viii) a nucleotide sequence encoding the amino

acid sequence represented by the 1st to 257th amino acids of SEQ ID NO:6;

NCv (ix) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (vii) or (viii) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the 1st to 257th amino acids of SEQ ID NO:6;

NDN (x) a nucleotide sequence represented by the 151st to 441st nucleotides of SEQ ID NO:7;

NDN (xi) a nucleotide sequence encoding the amino acid sequence represented by the 1st to 97th amino acids of SEQ ID NO:8;

NDv (xii) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (x) or (xi) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the 1st to 97th amino acids of SEQ ID NO:8;

NEv (xiii) a nucleotide sequence represented by the 151st to 624th nucleotides of SEQ ID NO:9;

NEv (xiv) a nucleotide sequence encoding the amino acid sequence represented by the 1st to 158th amino acids of SEQ ID NO:10;

NEv (xv) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (xiii) or (xiv) under stringent conditions and encoding a protein having the same property as that of the

protein having the amino acid sequence represented by the 1st to 158th amino acids of SEQ ID NO: 10;

NFN (xvi) a nucleotide sequence represented by the 151st to 396th nucleotides of SEQ ID NO:11;

NFN (xvii) a nucleotide sequence encoding the amino acid sequence represented by the 1st to 82nd amino acids of SEQ ID NO:12;

NFN (xviii) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (xvi) or (xvii) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the 1st to 82th amino acids of SEQ ID NO:12;

NGN (xix) a nucleotide sequence represented by the 151st to 705th nucleotides of SEQ ID NO:13;

NGN (xx) a nucleotide sequence encoding the amino acid sequence represented by the 1st to 185th amino acids of SEQ ID NO:14;

NGN (xxi) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (xiv) or (xx) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the 1st to 185th amino acids of SEQ ID NO:14;

NHN (xxii) a nucleotide sequence represented by the 151st to 390th nucleotides of SEQ ID NO:15;

NHN (xxiii) a nucleotide sequence encoding the amino acid sequence represented by the 1st to 80th amino acids of

SEQ ID NO:16;

NAV (xxiv) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (xxii) or (xxiii) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the 1st to 80th amino acids of SEQ ID NO:16;

NI_N (xxv) a nucleotide sequence represented by the 151st to 909th nucleotides of SEQ ID NO:17;

NI_N (xxvi) a nucleotide sequence encoding the amino acid sequence represented by the 1st to 253rd amino acids of SEQ ID NO:18;

NI_V (xxvii) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (xxv) or (xxvi) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the 1st to 253rd amino acids of SEQ ID NO:18;

NAPI_N (xxviii) a nucleotide sequence represented by the 4th to 105th nucleotides of SEQ ID NO:1;

NAPI_N (xxix) a nucleotide sequence encoding the amino acid sequence represented by the -49th to -16th amino acids of SEQ ID NO:2;

NAPI_V (xxx) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (xxviii) or (xxix) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented

by the -49th to -16th amino acids of SEQ ID NO:2;

NAP2N (xxxix) a nucleotide sequence represented by the 106th to 150th nucleotides of SEQ ID NO:1;

NAP2N (xxxix) a nucleotide sequence encoding the amino acid sequence represented by the -15th to -1st amino acids of SEQ ID NO:2;

NAP2V (xxxix) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (xxxix) or (xxxix) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the -15th to -1st amino acids of SEQ ID NO:2;

NIN (xxxix) a nucleotide sequence represented by the 227th to 1003rd nucleotides of SEQ ID NO:19;

NIN (xxxix) a nucleotide sequence encoding the amino acid sequence represented by the 1st to 259th amino acids of SEQ ID NO:20;

NIV (xxxix) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (xxxix) or (xxxix) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the 1st to 259th amino acids of SEQ ID NO:20;

NIPIN (xxxix) a nucleotide sequence represented by the 80th to 181st nucleotides of SEQ ID NO:19;

NIPIN (xxxix) a nucleotide sequence encoding the amino acid sequence represented by the -49th to -16th amino acids of SEQ ID NO:20;

NSP_{IV} (xxxix) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (xxxvii) or (xxxviii) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the -49th to -16th amino acids of SEQ ID NO:20;

NSP_{2N} (xl) a nucleotide sequence represented by the 182th to 226th nucleotides of SEQ ID NO:19;

NSP_{2N} (xli) a nucleotide sequence encoding the amino acid sequence represented by the -15th to -1st amino acids of SEQ ID NO:20;

NSP_{2V} (xl ii) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (xl) or (xli) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the -15th to -1st amino acids of SEQ ID NO:20;

NA_N (xl iii) a nucleotide sequence represented by the 4th to 954th nucleotides of SEQ ID NO:1;

NA_N (xl iv) a nucleotide sequence encoding the amino acid sequence represented by the -49th to 268th amino acids of SEQ ID NO:2;

NA_V (xl v) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (xl iii) or (xl iv) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the -49th to 268th amino acids of SEQ ID NO:2;

NAN (xlvi) a nucleotide sequence represented by the 106th to 954th nucleotides of SEQ ID NO:1;

NAN (xlvii) a nucleotide sequence encoding the amino acid sequence represented by the -15th to 268th amino acids of SEQ ID NO:2;

NAN (xlviii) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (xlvi) or (xlvii) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the -15th to 268th amino acids of SEQ ID NO:2;

NBN (xlix) a nucleotide sequence represented by the 4th to 960th nucleotides of SEQ ID NO:3;

NBN (l) a nucleotide sequence encoding the amino acid sequence represented by the -49th to 270th amino acids of SEQ ID NO:4;

NBN (li) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (xlix) or (l) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the -49th to 270th amino acids of SEQ ID NO:4;

NBN (lii) a nucleotide sequence represented by the 106th to 960th nucleotides of SEQ ID NO:3;

NBN (liii) a nucleotide sequence encoding the amino acid sequence represented by the -15th to 270th amino acids of SEQ ID NO:4;

NBN (liv) a nucleotide sequence hybridizable with a

Q12
nucleotide sequence which is complementary to the above
nucleotide sequence (lii) or (liv) under stringent conditions
and encoding a protein having the same property as that of the
protein having the amino acid sequence represented by the
-15th to 270th amino acids of SEQ ID NO:4;

NCM

(lv) a nucleotide sequence represented by the 4th to
921th nucleotides of SEQ ID NO:5;

NCN

(lvi) a nucleotide sequence encoding the amino acid
sequence represented by the -49th to 257th amino acids of SEQ
ID NO:6;

NCV

(lvii) a nucleotide sequence hybridizable with a
nucleotide sequence which is complementary to the above
nucleotide sequence (lv) or (lvi) under stringent conditions
and encoding a protein having the same property as that of the
protein having the amino acid sequence represented by the
-49th to 257th amino acids of SEQ ID NO:6;

NCN

(lviii) a nucleotide sequence represented by the
106th to 921th nucleotides of SEQ ID NO:5;

NCN

(lix) a nucleotide sequence encoding the amino acid
sequence represented by the -15th to 257th amino acids of SEQ
ID NO:6;

NCV

(lx) a nucleotide sequence hybridizable with a
nucleotide sequence which is complementary to the above
nucleotide sequence (lviii) or (lix) under stringent
conditions and encoding a protein having the same property as
that of the protein having the amino acid sequence represented
by the -15th to 257th amino acids of SEQ ID NO:6;

NCN

(lxi) a nucleotide sequence represented by the 80th

to 1003rd nucleotides of SEQ ID NO:19;

NSN (lxii) a nucleotide sequence encoding the amino acid sequence represented by the -49th to 259th amino acids of SEQ ID NO:20;

NSV (lxiii) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (lxi) or (lxii) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the -49th to 259th amino acids of SEQ ID NO:20;

NSN (lxiv) a nucleotide sequence represented by the 182nd to 1003rd nucleotides of SEQ ID NO:19;

NSN (lxv) a nucleotide sequence encoding the amino acid sequence represented by the -15th to 259th amino acids of SEQ ID NO:20;

NSV (lxvi) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (lxiv) or (lxv) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the -15th to 259th amino acids of SEQ ID NO:20;

NAN (lxvii) a nucleotide sequence represented by SEQ ID NO:1;

NAN (lxviii) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (lxvii) under stringent conditions and encoding a protein having the same property as that of the protein encoded by the nucleotide sequence represented by SEQ

ID NO:1;

NBN (lxiv) a nucleotide sequence represented by SEQ ID NO:3;

NBV (lxx) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (lxix) under stringent conditions and encoding a protein having the same property as that of the protein encoded by the nucleotide sequence represented by SEQ ID NO:3;

NLN (lxxi) a nucleotide sequence represented by SEQ ID NO:5;

NLV (lxxii) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (lxxi) under stringent conditions and encoding a protein having the same property as that of the protein encoded by the nucleotide sequence represented by SEQ ID NO:5;

NDN (lxxiii) a nucleotide sequence represented by SEQ ID NO:7;

NDV (lxxiv) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (lxxiii) under stringent conditions and encoding a protein having the same property as that of the protein encoded by the nucleotide sequence represented by SEQ ID NO:7;

NE_N (lxxv) a nucleotide sequence represented by SEQ ID NO:9;

NE_V (lxxvi) a nucleotide sequence hybridizable with a

nucleotide sequence which is complementary to the above nucleotide sequence (lxxv) under stringent conditions and encoding a protein having the same property as that of the protein encoded by the nucleotide sequence represented by SEQ ID NO:9;

CHY
NFN (lxxvii) a nucleotide sequence represented by SEQ ID NO:11;

NFV (lxxviii) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (lxxvii) under stringent conditions and encoding a protein having the same property as that of the protein encoded by the nucleotide sequence represented by SEQ ID NO:11;

NGN (lxxix) a nucleotide sequence represented by SEQ ID NO:13;

NGV (lxxx) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (lxxix) under stringent conditions and encoding a protein having the same property as that of the protein encoded by the nucleotide sequence represented by SEQ ID NO:13;

NHN (lxxxii) a nucleotide sequence represented by SEQ ID NO:15;

NHV (lxxxiii) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (lxxxii) under stringent conditions and encoding a protein having the same property as that of the protein encoded by the nucleotide sequence represented by SEQ

ID NO:15;

NH_N (lxxxiii) a nucleotide sequence represented by SEQ ID NO:17;

NH_v (lxxxiv) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (lxxxiii) under stringent conditions and encoding a protein having the same property as that of the protein encoded by the nucleotide sequence represented by SEQ ID NO:17;

NI_N (lxxxv) a nucleotide sequence represented by SEQ ID NO:19;

NI_v (lxxxvi) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (lxxxv) under stringent conditions and encoding a protein having the same property as that of the protein encoded by the nucleotide sequence represented by SEQ ID NO:19; and

J (lxxxvii) a fragment of these nucleotide sequences (i) to (lxxxvi).--

--78(New). A process for producing a protein which comprises culturing cells transformed with the nucleotide sequence *NI_v* (lxxxiv) to *NI_N* (lxxxvi), *NI_v* (lxxxv) or *NI_N* (lxxxvi) of claim 7 or a fragment thereof, and collecting mBSSP4 produced.--

--79(New). The process according to claim 78, wherein the cells are *E. coli* cells, animal cells or insect

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cells.--

--80(New). The method according to claim 68,
wherein the specimen is a body fluid.--

84
--81(New). The method according to claim 69,
wherein the specimen is a body fluid.

--82(New). A method for screening for an inhibitor
of serine protease comprising comparing the enzyme activity of
the protein according to claim 76 upon bringing it into
contact with a candidate compound with the enzyme activity of
the protein without contact with the candidate compound.--

--83(New). A pharmaceutical composition comprising
the protein according to claim 76.--

--84(New). A method for detecting a diagnostic
marker for diseases in tissues comprising the protein
according to claim 76, which comprises using the antibody
against the protein according to claim 76.--

--85(New). The method according to claim 83,
wherein the marker is used for diagnosis of a cancer.--
